What Is The KSC Vision Of Processing Space Vehicles In The Most Cost Effective Manner?

- Control Room Layout Needs To Be Finalized By End Of May !
- Challenge For Vision & Direction From Mr. Sieck
- How Are We Going To Change/Consolidate/Improve (Tomorrow and Next Year)
  - Our Processes ?
  - Our Culture ?
- How Are We Going To Maintain Flexibility ?
- What are the Control Room Layout & Console Layout ?
  - “Must Haves”
  - “Wants”

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What CLCS Needs from YOU, Our Customers

- **COMMITTED, CONSISTENT User Involvem**
- **User Liaison - Full Time Integr nation**
- **Core Group**
  - **2 Representative Each 2nd Line User Directorate**
  - **Participation will Vary as Development Evolves**
  - **Coordination/Integration Function**
  - **Represent Organization and Can Commit for Organization**
  - **Ability to 'Step Out of the Box' and Visualize Shuttle Processing in 2001**
- **Provide Names by November 8, 1996**

Established In October 96

We Now Need The Management Vision

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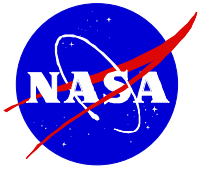
Increased Efficiency Through

- Larger Screens With Better Graphics That Are Easier To Understand
- Consolidated Data-Data Fusion-Data Health
- Bring Stand-Alone System Data Into CLCS
- Increased Levels Of Automation & Flexability with
  - Memory Limits
  - Concurrency Limits
  - Seat Assignments
  - Scripting
  - Business Systems Access
- Universal Console
  - Including Safing Panel



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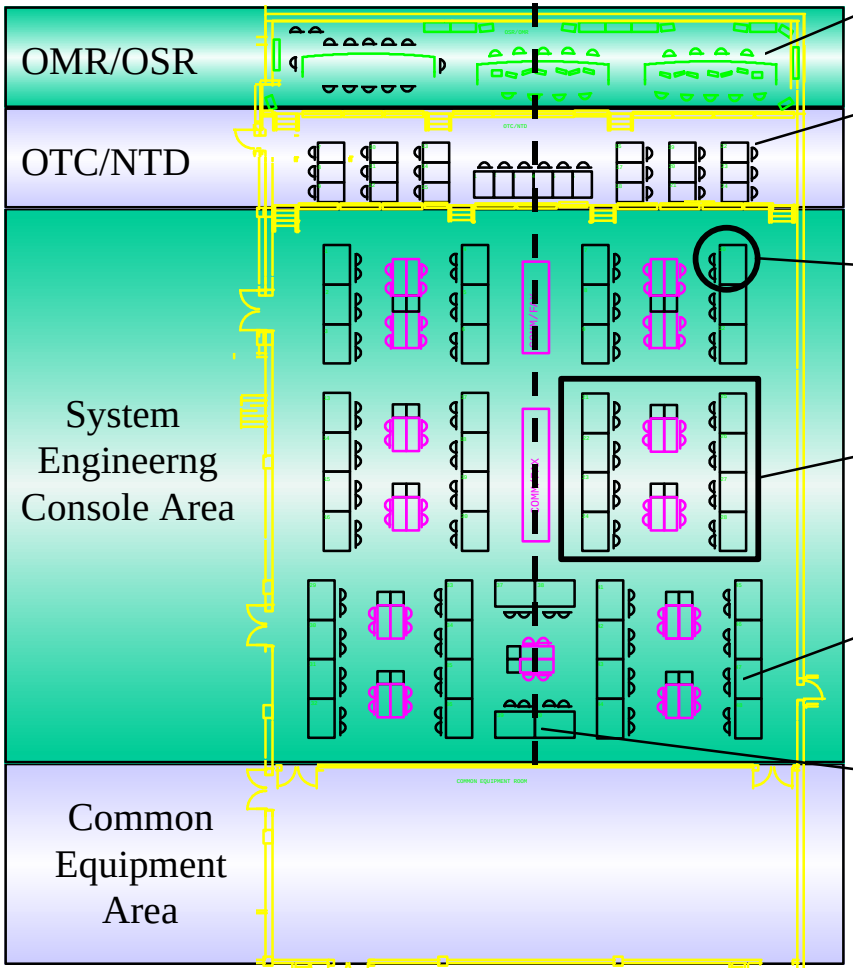
Notional OCR Layout

Symmetrical Layout for
Easy Flow Zone Definition



Consolidated OMR/OSR with Business Systems & Data access.

OTC/NTD Consoles with Data Monitoring and Business Systems Access

Working to a 6'x4' Command Seat Console Footprint (One Command/ Business Position-Two Seats)

Ability to support Logical Systems Groupings

Critical CCS Functions Move to the Main Room (Firex & Sound Suppression). Other CCS LPS systems migrate to COTS.

Master Console Functions Integrated Into the Main Room

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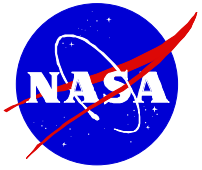
Rationale For New

- General Guidelines-Goals
  - Reduce total number of personnel in OCR for major integrated tests & Routine Operations
  - Standardized Console (command position)
  - Separate Command & Data/Monitor
  - Provide Maximum Information to the User
    - Multi Vehicle-Multi Site Consolidated Monitor Capability
    - Integrated OTV
    - Integrated Business Systems' CPU/Display
    - Legacy Equipment-OIS, Area Warning, etc.
  - Flexible H/W Safing (Reconfigurable)
  - Reduce personnel required for routine (monitoring) operations
  - Flexible reconfiguration Control Room Assetts



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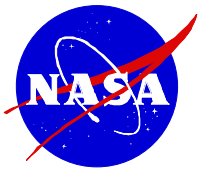
Command Position Characteristics

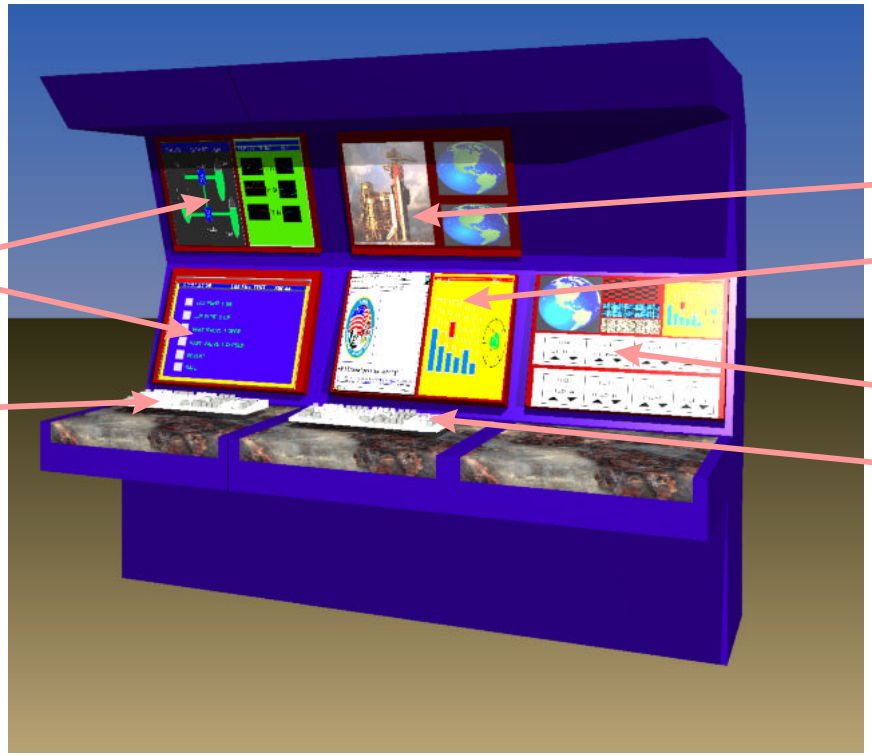
- One or Two Command/Control Screens
- One Command/Control Keyboard
- One Business Systems Monitor (and CPU)
  - Isolated from Command/Control network
  - Provides Business/Institutional Network access
    - Provides CPU capable of running business COTS applications
    - Provides WEB, X-Term and 3270 Terminal capabilities
- Redesigned OTV
- Bay Area For Legacy Systems
  - OIS-D
  - Area Warning
  - Reconfigurable Safing



CLCS Console Components

(*Notional Concept*)

- Command & Control Screens
- Command Keyboard



- OTV Display
- Business/Monitor Screen
- Legacy Equip.
- Business Keyboard

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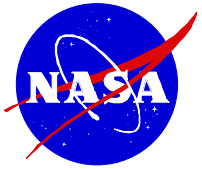
Comparison

- CCMS (Firing Room)
  - 15 Consoles (3 positions)
    - 1 Limited CPU/Console
    - Console S/W Loads restricted to an RSYS subset
    - Display system integrated with the command/control system
    - Pseudo Graphics, Low-Resolution Displays
    - Multiple Command Keyboards/CPU-Console Set
- CLCS (OCR)
  - **??** Command Positions
    - 1 Command CPU/Position
    - Console S/W Loads allows any RSYS or TCID Data Viewing
    - Display system separated from the command/control system
    - High-Resolution Graphical Displays
    - Single Command Keyboard/Command CPU Position



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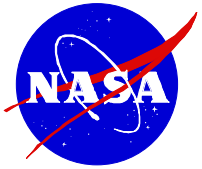
Challenges

- Define the most flexible and optimum control room future operational needs
  - OCR-1 and OCR-2 For Launch
  - OCR-3 Multi-Flow Configuration
- Reduce support & operations costs while increasing business efficiencies
- Arrange console groupings to facilitate user communications and function
- Look beyond our current business model and describe or define how you WANT to do processing operations from the CLCS



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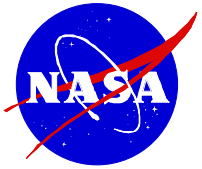

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